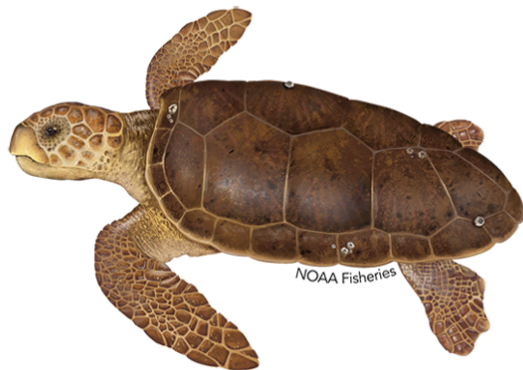




Loggerhead Turtle

Loggerhead Turtle

Caretta caretta



Protected Status

ESA ENDANGERED

North Pacific Ocean DPS

ESA ENDANGERED - FOREIGN

Mediterranean Sea DPS

ESA ENDANGERED - FOREIGN

Northeast Atlantic Ocean DPS

ESA ENDANGERED - FOREIGN

North Indian Ocean DPS

ESA ENDANGERED - FOREIGN

South Pacific Ocean DPS

ESA THREATENED

Northwest Atlantic Ocean DPS

ESA THREATENED - FOREIGN

South Atlantic Ocean DPS

ESA THREATENED - FOREIGN

Southeast Indo-Pacific Ocean DPS

ESA THREATENED - FOREIGN

Southwest Indian Ocean DPS

CITES APPENDIX I

Throughout Its Range

Quick Facts

WEIGHT	Adult: 200 to 350 pounds
LIFESPAN	Unknown, but estimated to be 70 years or more
LENGTH	Adult: 2.5 to 3.5 feet
THREATS	Bycatch in fishing gear, Climate change, Direct harvest of turtles and eggs, Loss and degradation of nesting habitat, Ocean pollution/marine debris, Predation of eggs and hatchlings, Vessel strikes
REGION	New England/Mid-Atlantic, Pacific Islands, Southeast, West Coast, Foreign



Loggerhead turtle - Credit: NOAA Fisheries

About the Species

The loggerhead turtle is named for its large head, which supports powerful jaw muscles that enable them to feed on hard-shelled prey, such as whelks and conch. Loggerheads are the most abundant species of sea turtle that nests in the United States. Juvenile and adult loggerheads live in U.S. coastal waters, but many adults that nest on U.S. beaches migrate from neighboring nations like the Bahamas, Cuba, and Mexico.

Loggerhead populations in the United States declined due to [bycatch](#) in fishing gear such as trawls, gillnets, and longlines. The use of [turtle excluder devices \(TEDs\)](#) in shrimp trawls, gillnet bans, and other gear modification have reduced sea turtle bycatch in some fisheries, but bycatch in fishing gear remains the biggest threat facing loggerheads.

NOAA Fisheries and our partners are dedicated to protecting and recovering sea turtle populations worldwide. We use a variety of innovative techniques to study, protect, and recover these threatened and endangered species. We engage our partners as we develop measures and recovery plans that foster the conservation and recovery of loggerhead turtles and their habitats.

Population Status

Loggerhead turtles are found worldwide with nine distinct population segments (DPS) listed under the [Endangered Species Act](#). The most recent reviews show that only two loggerhead nesting beaches have greater than 10,000 females nesting per year: South Florida and Oman. Oman hosts the second largest nesting assemblage of loggerheads in the world, but recent trends analyses indicate this important nesting population is declining.

In the United States, the Northwest Atlantic Ocean DPS of loggerhead turtles nests primarily along the Atlantic coast of Florida, South Carolina, Georgia, and North Carolina and along the Florida and Alabama coasts in the Gulf of Mexico. Total estimated nesting in the United States is more than 100,000 nests per year.

Loggerheads nest sparsely throughout the Caribbean, on both sides of the Atlantic Ocean (Cape Verde Islands and Brazil), in the eastern Mediterranean Sea, throughout the Indian Ocean in small numbers (with the exception of Oman), and in the North and South Pacific Ocean.

In the Pacific, there are two distinct population segments of loggerheads. The North Pacific Ocean DPS nests only on the coasts of Japan. This population has declined 50 to 90 percent during the last 60 years, however the overall nesting trend in Japan has been stable or slightly increasing over the last decade. The South Pacific Ocean DPS nests primarily in Australia with some nesting in New Caledonia. In 1977, about 3,500 females may have nested in the South Pacific—today there are only around 500 per year.

The [2009 status review of the loggerhead sea turtle](#) and the [5-Year Review of the North Pacific Ocean Distinct Population Segment of Loggerhead Sea Turtle](#) provide additional population information for this species.

Protected Status

ESA Endangered

- North Pacific Ocean DPS

ESA Endangered - Foreign

- Mediterranean Sea DPS

ESA Endangered - Foreign

- Northeast Atlantic Ocean DPS

ESA Endangered - Foreign

- North Indian Ocean DPS

ESA Endangered - Foreign

- South Pacific Ocean DPS

ESA Threatened

- Northwest Atlantic Ocean DPS

ESA Threatened - Foreign

- South Atlantic Ocean DPS

ESA Threatened - Foreign

- Southeast Indo-Pacific Ocean DPS

ESA Threatened - Foreign

- Southwest Indian Ocean DPS

CITES Appendix I

- Throughout Its Range

Appearance

Loggerhead turtles have large heads with powerful jaws. The top shell (carapace) is slightly heart-shaped and reddish-brown in adults and sub-adults, while the bottom shell (plastron) is generally a pale yellowish color. The neck and flippers are usually dull brown to reddish brown on top and medium to pale yellow on the sides and bottom. Unlike freshwater turtles and tortoises, sea turtles cannot withdraw their head or flippers into their shells. Hatchlings are mostly dark brown, their flippers have white to white-gray margins, and the bottom shell is generally yellowish to tan.

Behavior and Diet

Loggerhead turtles, like all sea turtles, are marine reptiles and must come to the surface to breathe air. Adult female sea turtles return to land to lay their eggs in the sand—they are remarkable navigators and usually return to a beach in the general area where they hatched decades earlier.

The life history of loggerhead turtles involves a series of stages of development from hatchling to adult. Hatchlings and juveniles spend the first 7 to 15 years of their lives in the open ocean. Then they migrate to nearshore coastal areas where they will forage and continue to grow for several more years. Adult loggerhead turtles migrate hundreds to thousands of kilometers from their foraging grounds to their nesting beaches.

Through satellite tracking, researchers have discovered that loggerheads in the Pacific undertake a trans-Pacific migration. Hatchlings from nesting beaches in Japan and Australia migrate across the Pacific to feed off the coast of Baja California, Mexico, Peru and Chile—nearly 8,000 miles! They spend many years (possibly up to 20 years) growing to maturity and then migrate back to the beaches where they hatched in the Western Pacific Ocean to mate and nest and live out the remainder of their lives.

Loggerheads are carnivores, only occasionally consuming plant material. During their open ocean phase, they feed on a wide variety of floating items. Unfortunately, trash and other debris discarded by humans also tends to accumulate in their habitat. Small fragments of plastic are often mistaken for food and eaten by turtles. Juveniles and adults in coastal waters eat mostly bottom dwelling invertebrates such as whelks, other mollusks, horseshoe crabs, and other crabs. Their powerful jaws are designed to crush their prey.

Where They Live

Loggerhead turtles are found worldwide primarily in subtropical and temperate regions of the Atlantic, Pacific, and Indian Oceans, and in the Mediterranean Sea. In the Atlantic, the loggerhead turtle's range extends from Newfoundland to Argentina. In the eastern Pacific, loggerheads have been reported from Alaska to Chile.

World map providing approximate representation of the loggerhead turtle's range.

Lifespan & Reproduction

Loggerhead sea turtles are long-lived and could live 70 to 80 years or more. Female loggerheads reach maturity at about 35 years of age. Every 2 to 3 years they mate in coastal waters and return to nest on a beach in the general area where they hatched decades earlier.

In the northern hemisphere, mating occurs in late March to early June and females lay eggs between late April and early September. Loggerheads are solitary, night-time nesters, and they generally prefer high energy, relatively narrow, steeply sloped, coarse-grained beaches for nesting. Adult females lay three to five nests, sometimes more, two weeks apart during a single nesting season. Each nest contains about 100 eggs. The sex of hatchlings is determined by the temperature of the sand—cooler temperatures produce males and warmer temperatures produce females. After about 2 months incubating in the warm sand, the eggs hatch and the hatchlings make their way to the water. Newly hatched loggerhead turtles are susceptible to predators. They are particularly threatened by artificial beachfront lighting, which can disorient them and prevent them from finding the sea. Hatchlings orient by moving away from the darkest silhouette of the landward dune or vegetation to crawl towards the brightest horizon. On undeveloped beaches, this is toward the open horizon over the ocean. However, in areas with artificial lighting hatchlings are disoriented and often crawl landward instead of toward the ocean. Artificial light can similarly disorient nesting female turtles.

Threats

Bycatch in Fishing Gear

A primary threat to sea turtles is their unintended capture in fishing gear which can result in drowning or cause injuries that lead to death or debilitation (for example, swallowing hooks). The term for this unintended capture is [bycatch](#). Sea turtle bycatch is a worldwide problem. The greatest continuing primary threat to loggerhead turtle populations worldwide is bycatch in fishing gear, primarily in trawls, longlines, gillnets, hook and line, but also in pound nets, pot/traps, and dredge fisheries.

Loss and Degradation of Nesting Habitat

Coastal development and rising seas from climate change are leading to the loss of critical nesting beach habitat for loggerhead turtles. Shoreline hardening or armoring (e.g., seawalls) can result in the complete loss of dry sand suitable for successful nesting. Artificial lighting on and near nesting beaches can deter nesting females from coming ashore to nest and can disorient hatchlings trying to find the sea after emerging from their nests.

Vessel Strikes

Vessel strikes are a major threat to loggerhead turtles near developed coastlines throughout their range. Various types of watercraft can strike loggerhead turtles when they are at or near the surface resulting in injury or death. In the Atlantic Ocean and Gulf of Mexico, the number of loggerhead turtle deaths due to vessel strikes are increasing. High traffic boat areas such as marinas and inlets present a higher risk. Adult loggerhead turtles, in particular nesting females, are more susceptible to vessel strikes when making reproductive migrations and while they are nearshore during the nesting season.

Direct Harvest of Turtles and Eggs

Historically, sea turtles including loggerheads were killed for their meat and their eggs which are collected for consumption in some countries. Presently, loggerhead turtles are protected in many countries where they occur, but in some places, the killing of loggerheads and collection of eggs continue to be a threat.

Ocean Pollution/Marine Debris

Increasing pollution of nearshore and offshore marine habitats threatens all sea turtles. Loggerhead turtles may die after ingesting fishing line, plastic bags and other plastic debris, floating tar or oil, and other materials discarded by humans which they can mistake for food. They can also become entangled in marine debris, including lost or discarded fishing gear, and can be killed or seriously injured.

Climate Change

For all sea turtles, a [warming climate](#) is likely to result in changes in beach morphology and higher sand temperatures which can be lethal to eggs, or alter the ratio of male and female hatchlings produced. Rising seas and storm events cause beach erosion which may flood nests or wash them away. Changes in the temperature of the marine environment are likely to alter the abundance and

distribution of food resources, leading to a shift in the migratory and foraging range and nesting season of loggerheads.

Scientific Classification

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Testudines
Family	Cheloniidae
Genus	<i>Caretta</i>
Species	<i>caretta</i>

What We Do

Conservation & Management

Since 1977, NOAA Fisheries and the [U.S. Fish and Wildlife Service](#) have shared jurisdiction of sea turtles listed under the ESA. A Memorandum of Understanding outlines our specific roles: NOAA Fisheries lead the conservation and recovery efforts for sea turtles in the marine environment, and the U.S. FWS lead conservation and recovery efforts for sea turtles on nesting beaches.

We are committed to the protection and conservation of loggerhead turtles by:

- Working with our partners to ensure compliance with national and state laws to protect sea turtles
- Cooperating with international partners to implement conservation measures and establish agreements, such as international treaties that protect sea turtles
- Researching, developing, and implementing changes to fishing gear practices and/or fishing gear modifications (e.g., [turtle excluder devices](#)), using large circle hooks in longline fisheries, and implementing spatial or temporal closures to avoid or minimize bycatch
- Designating critical habitat areas essential for the conservation of loggerhead turtles
- Protecting and monitoring loggerhead sea turtle populations on their nesting beaches
- Conducting research on threats and developing conservation measures that reduce threats and promote recovery

- Collecting information on the species biology and ecology to better inform conservation management strategies and to assess progress toward recovery
- Working with partners to study and raise awareness about illegal sea turtle trade

[Learn more about our conservation and management efforts >](#)

Science

We conduct various research activities on the biology, behavior, and ecology of loggerhead sea turtles. The results of this research are used to evaluate population trends, inform conservation management strategies, and to assess progress toward recovery for this imperiled species. Our work includes:

- Monitoring populations through vessel-based or aerial surveys, nesting beach studies, satellite tracking, genetics, and mark-recapture (flipper tagging) studies
- Studying foraging and reproductive behavior to understand demographics, physiology, habitat use, and resource requirements
- Tracking individuals over time to understand important aspects of their life history such as growth and age to maturity
- Evaluating life history and population health information from stranding and fisheries bycatch datasets
- Understanding impacts of change in environmental and ocean conditions on sea turtle abundance, distribution, and demographics
- Monitoring fisheries impacts and designing fishing gear to minimize bycatch during commercial and recreational fishing operations
- Capacity building and training to share the latest scientific techniques and tools to monitor sea turtle populations globally

[Learn more about our research >](#)

How You Can Help

Reduce Ocean Trash

Reduce marine debris and participate in coastal clean-up events. Responsibly dispose of fishing line - lost or discarded fish line kills hundreds of sea turtles and other animals every year. Trash in the environment can end up in the ocean and harm marine life.

Reduce plastic use to keep our beaches and oceans clean—carry reusable water bottles and shopping bags.

Refrain from releasing balloons—they can end up in the ocean where sea turtles can mistake them for prey like jellyfish or become entangled in lines.

[Learn more about marine debris >](#)

Keep Your Distance

Admire sea turtles from a respectful distance by land or sea and follow these guidelines:

Don't disturb nesting turtles, nests, or hatchlings. If interested, attend organized sea turtle watches that know how to safely observe sea turtles.

Never feed or attempt to feed or touch sea turtles as it changes their natural behavior and may make them more susceptible to harm.

Boat strikes are a serious threat to sea turtles. When boating, **watch for sea turtles in the water, slow down, and steer around them.** If you encounter them closer than 50 yards, put your engine in neutral to avoid injury. Remember, *Go Slow, Sea Turtles Below!*

[Learn more about our marine life viewing guideline >](#)

Protect Sea Turtle Habitat

Beaches are paramount for healthy sea turtle populations since females come to the shore to deposit their eggs into nests.

Keep nesting beaches dark and safe at night. Turn off, shield, or redirect lights visible from the beach—lights disorient hatchlings and discourage nesting females from coming onto beaches to lay their eggs.

After a day at the beach, remove recreational beach equipment like chairs and umbrellas so sea turtles are not entrapped or turned away. Also, fill in holes and knock down sandcastles before you leave—they can become obstacles for nesting turtles or emerging hatchlings.

Do not drive on sea turtle nesting beaches—vehicles can deter females from nesting, directly strike hatchlings and nesting turtles, damage incubating nests, and create ruts that prevent hatchlings from reaching the sea.

Report Marine Life in Distress

If you see a stranded, injured, or entangled sea turtle, contact professional responders and scientists who can take appropriate action. Numerous organizations around the country are trained and ready to respond.

[Learn who you should contact when you encounter a stranded or injured marine animal >](#)

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In the Spotlight Management Overview

Loggerhead turtles are protected under the [Endangered Species Act](#). Nine distinct population segments (DPS) are listed as endangered or threatened. This means that the loggerhead turtle is in danger of extinction, now or in the foreseeable future, throughout all or a significant portion of its range. NOAA Fisheries is working to protect this species in many ways, with the goal of conserving and recovering each of the DPSs.

In the United States, NOAA Fisheries and the U.S. Fish and Wildlife Service have joint jurisdiction for sea turtles, with NOAA having the lead in the marine environment and U.S. FWS having the lead on the nesting beaches. Both federal agencies, along with many state and U.S. territory agencies and international partners, are working together to conserve and recover sea turtles and have issued regulations to eliminate or reduce threats to sea turtles.

Recovery Planning and Implementation

Recovery Action

To help identify and guide the protection, conservation, and recovery of sea turtles, the ESA requires NOAA Fisheries and the U.S. FWS to develop and implement recovery plans which provide a blueprint for conservation of the species and measurable criteria to gauge progress toward recovery.

The major recovery actions for loggerhead turtles include:

- Protecting sea turtles on nesting beaches and in marine environments
- Protecting nesting and foraging habitats
- Reducing bycatch in commercial, artisanal, and recreational fisheries
- Reducing the effects of entanglement and ingestion of marine debris
- Reducing vessel strikes in coastal habitats
- Working with partners internationally to protect turtles in all life-stages
- Supporting research and conservation projects consistent with Recovery Plan priorities

Two recovery plans have been developed to recover and protect loggerhead turtle populations that are found in U.S. waters. Each is focused on the unique needs of turtles in the various regions.

- [Recovery Plan for the Northwest Atlantic Population of Loggerhead Sea Turtle](#)
- [Recovery Plan for the U.S. Pacific Populations of Loggerhead Sea Turtle](#)

The highly migratory behavior of sea turtles makes them shared resources among many nations, so conservation efforts for sea turtle populations must extend beyond national boundaries. This necessitates international collaboration and coordination. Learn more about international conservation efforts below.

Loggerhead turtle (Caretta caretta) escaping a net equipped with a turtle excluder device. Photo: NOAA.

Implementation

NOAA Fisheries is working to minimize effects from human activities that are detrimental to the recovery of loggerhead turtles populations in the United States and internationally. Together with our

partners, we undertake numerous activities to support the goals of the loggerhead turtle recovery plans, with the ultimate goal of species recovery.

Efforts to conserve loggerhead sea turtles include:

- Protecting habitat and designating critical habitat
- Reducing bycatch
- Rescue, disentanglement, and rehabilitation
- Eliminating the killing of turtles and the collection of their eggs
- Eliminating the harassment of turtles on nesting beaches through education and enforcement
- Consulting with federal agencies to ensure their activities are not likely to jeopardize the continued existence of listed species

Critical Habitat

Once a species is listed under the ESA, NOAA Fisheries evaluates and identifies whether any marine areas meet the definition of [critical habitat](#). Those areas may be designated as critical habitat through a rulemaking process. A critical habitat designation does not set up a marine preserve or refuge. Rather, federal agencies that undertake, fund, or permit activities that may affect designated critical habitat areas are required to consult with NOAA Fisheries to ensure that their actions do not adversely modify or destroy these designated critical habitats.

NOAA Fisheries and the U.S. FWS designated critical habitat for the Northwest Atlantic Ocean DPS of loggerhead turtles in waters and beach habitat of the Gulf of Mexico and along the coast of the U.S. Atlantic Ocean.

Specific areas designated include 38 occupied marine areas within the range of the Northwest Atlantic Ocean DPS of loggerhead turtles. These areas contain combinations of nearshore reproductive habitat, winter areas, breeding areas, migratory corridors, and Sargassum habitat.

[View the loggerhead sea turtle critical habitat map >](#)

The U.S. FWS addressed approximately [685 miles of nesting beaches](#) in North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi in a separate rulemaking.

Conservation Efforts

Reducing Bycatch

NOAA Fisheries is working to reduce the bycatch of sea turtles in commercial fisheries. Our efforts are focused on documenting bycatch, understanding how, why, and where sea turtles are bycaught, and how to reduce that bycatch. We have developed modifications to fishing gear and practices to reduce bycatch and/or reduce bycatch injuries. We require these modifications in certain U.S.

commercial fisheries including gillnets, longlines, pound nets, scallop dredges, and trawls that accidentally catch sea turtles. Measures include:

- Gear modifications
- Changes to fishing practices
- Time/area closures

In the United States, NOAA Fisheries has worked closely with the shrimp trawl fishing industry to develop [turtle excluder devices](#) (TEDS) to reduce the mortality of sea turtles bycaught in shrimp trawls. TEDs are required in the shrimp otter trawl fishery and, in early 2021, in larger vessels participating in the skimmer trawl fishery.

Since 1989, the [United States has prohibited the importation of shrimp harvested in a manner that adversely affects sea turtles](#). The import ban does not apply to nations that have adopted sea turtle protection programs comparable to that of the U.S. (i.e., require and enforce the use of TEDs) or to nations where bycatch in shrimp fisheries does not present a threat to sea turtles (for example, nations that fish for shrimp in areas where sea turtles do not occur). The [U.S. Department of State is the principal implementing agency of this law](#) while NOAA Fisheries serves as technical advisor and provides extensive TED training throughout the world.

We are also involved in cooperative gear research projects, implementation of changes to gear and fishing practices, and safe handling protocols designed to reduce sea turtle bycatch and mortality in the Gulf of Mexico and Atlantic pelagic longline fisheries, the American Samoa and [Hawaii-based longline fisheries](#), the Atlantic sea scallop dredge fishery, and non-shrimp trawl fisheries in the Atlantic and Gulf of Mexico.

Fisheries Observers

[Bycatch](#) in fishing gear is the primary human-caused source of sea turtle injury and mortality in U.S. waters. The most effective way to learn about bycatch is to place [observers](#) aboard fishing vessels. Observers collect important information that allows us to understand the amount and extent of bycatch, how turtles interact with the gear, and how bycatch reduction measures are working.

NOAA Fisheries determines which fisheries are required to carry observers, if requested to do so, through an [annual determination](#). Observers may also be placed on fishing vessels through our authorities under the [Magnuson-Stevens Act](#).

Responding to Strandings and Entanglements

A stranded sea turtle is one that is found on land or in the water and is either dead or is alive but unable to undergo normal activities and behaviors due to an injury, illness, or other problem. Most strandings are of individual turtles, and thousands are documented annually along the coasts of the United States and its territories. Organized networks of trained stranding responders are authorized to recover dead turtles or assist live turtles and document important information about the causes of strandings. These networks include federal, state, and private organizations. The actions taken by stranding network participants improve the survival of sick, injured, and entangled turtles while also

helping scientists and managers expand their knowledge about threats to sea turtles and causes of mortality.

Because sea turtles spend most of their life at sea and out of sight, information learned from strandings are an important way for us to identify and monitor problems that threaten sea turtle populations.

Within the United States and its Territories, there are three regional networks that serve to document and rescue stranded and entanglement sea turtles:

- Atlantic Ocean, Gulf of Mexico, and Caribbean: Coordinated under the [Sea Turtle Stranding and Salvage Network \(STSSN\)](#)
- Pacific Ocean (continental U.S. West Coast): Coordinated by NOAA's West Coast Regional Office
- Pacific Islands (Hawaii, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands): Coordinated by NOAA's Pacific Islands Fisheries Science Center and the Pacific Islands Regional Office

The actions taken by stranding network participants improve the survivability of sick, injured, and entangled turtles while also helping scientists and managers to expand their knowledge about diseases and other threats that affect sea turtles in the marine environment and on land.

International Conservation Efforts

The conservation and recovery of sea turtles requires international cooperation and agreements to ensure the survival of these highly migratory animals. We work closely with partners in many countries across the globe to promote sea turtle conservation and recovery. Two international agreements specifically focused on sea turtle conservation are:

- [Indian Ocean - South-East Asian \(IOSEA\) Marine Turtle Memorandum of Understanding](#)
- [Inter-American Convention \(IAC\) for the Protection and Conservation of Sea Turtles](#)

Additional international treaties and agreements that also protect sea turtles include:

- [Convention on International Trade in Endangered Species \(CITES\)](#): Listed in Appendix I, which prohibits international trade of wild flora and fauna
- Cartagena Convention: Protected under Annex II of the [Specially Protected Areas and Wildlife \(SPA\) Protocol](#)

Regulatory History

The loggerhead turtle was first listed under the ESA as threatened throughout its range in 1978. In 2011, NOAA Fisheries and the U.S. FWS determined that the loggerhead sea turtle was composed

of nine distinct population segments (DPS) that constitute “species” that may be listed as threatened or endangered under the ESA—[four DPSs were listed as threatened and five were listed as endangered](#). The [2009 status review](#) provided the scientific basis to revise the ESA listings.

In 1992, we finalized [regulations to require turtle excluder devices](#) (TEDs) in shrimp trawl fisheries to reduce sea turtle bycatch. Since then, we have updated these regulations as new information became available and TEDs were modified to improve their turtle exclusion rates. TEDs are also required in the summer flounder fishery in certain areas along the Atlantic coast of the United States.

We have also implemented other measures to reduce sea turtle bycatch in fisheries through regulations and permits under both the ESA and [Magnuson-Stevens Act](#). These requirements include the use of large circle hooks in longline fisheries, time and area closures for gillnets, and modifications to pound net leaders and Atlantic sea scallop dredges.

[See all regulations to protect sea turtles >](#)

Key Actions and Documents

Actions & Documents

Incidental Take

Foreign Loggerhead Sea Turtle DPSs 5-Year Review

In 2019, NMFS announced the initiation of a 5-year review for seven foreign loggerhead Distinct Population Segments (DPSs): Mediterranean Sea DPS, Northeast Atlantic Ocean DPS, North Indian Ocean DPS, South Pacific Ocean DPS, South...

- [> Notice of Initiation of a 5-Year Review \(84 FR 70958, 12/26/2019\)](#)
- [> 7 Foreign Loggerhead Sea Turtle DPSs 5-year Review](#)

Notice

, Foreign

PUBLISHED

February 26, 2021

5-Year Review of North Pacific Distinct Population Segment of Loggerhead Sea Turtle

NOAA Fisheries and the U.S. Fish and Wildlife Services are jointly responsible for the protection and conservation of all sea turtles under the Endangered Species Act (ESA). Under section 4(c)(2) of the Endangered Species Act, we are required...

- [> Notice of Initiation of 5-year review; request for information \(81 FR 70394, Oc...](#)
- [> 5-year Review of North Pacific DPS of Loggerhead Sea Turtle](#)

Notice

, [Pacific Islands](#), [West Coast](#)

PUBLISHED

April 7, 2020

Final Annual Determination for 2020

NOAA Fisheries publishes the final Annual Determination (AD) for 2020, pursuant to its authority under the Endangered Species Act. Through the AD, NOAA Fisheries identifies U.S. fisheries operating in the Atlantic Ocean, Gulf of Mexico, and Pacific...

- [Final Annual Determination for 2020 \(85 FR 53684; August 31, 2020\)](#)
- [Proposed Annual Determination for 2020 \(85 FR 3880; January 23, 2020\)](#)
- [More Information: Sea Turtle Annual Determination](#)

Final Rule

, [National](#)

EFFECTIVE

09/30/2020

Notice of Initiation of a 5-Year Review of Northwest Atlantic Ocean and Seven Foreign Distinct Population Segments of Loggerhead Sea Turtle

NOAA Fisheries and U.S. FWS announce the initiation of a 5-year review for the following distinct population segments (DPS) of loggerhead sea turtle (*Caretta caretta*): The Mediterranean Sea DPS, the Northeast Atlantic Ocean DPS, the North Indian...

- [Notice of Initiation \(84 FR 70958, 12/26/2019\)](#)
- [Loggerhead Turtle Species Profile](#)

Notice

, [National](#)

PUBLISHED

December 26, 2019

[1](#) [2](#) [Last »](#)

»

Science Overview

NOAA Fisheries conducts research on the biology, behavior, and ecology of the loggerhead sea turtle. The results of this research are used to inform management decisions and enhance recovery efforts for the species.

Pacific Islands TurtleWatch

TurtleWatch is a [mapping project](#) that provides up-to-date information about the thermal habitat of loggerhead sea turtles in the Pacific Ocean north of the Hawaiian Islands. By identifying the ocean habitat favored by loggerhead turtles, the TurtleWatch maps are expected to help longline fishing vessels deploy their fishing gear in areas where loggerheads are less likely to occur. In this way, NOAA Fisheries hopes to provide benefits not only to the turtles, but also to fishermen, who operate under strict limits on the number of turtle interactions allowed.

Population Assessments

Sea turtle population assessments ideally include information on the species' abundance and distribution, life history, and human impacts. This information can help NOAA Fisheries evaluate the effectiveness of conservation and recovery measures, and can help guide actions to enhance recovery. To estimate population abundance, researchers conduct aerial and vessel-based surveys of selected areas and capture and mark turtles in the water and on beaches. We also incorporate data collected on nesting beaches via [stranding networks](#) and from [fisheries observer programs](#). Other information that informs sea turtle population assessments includes population structure (genetic analyses), age to maturity, survivorship of the various life stages (e.g., hatchling, juvenile, adult) foraging and reproductive behavior, movement and distribution, and habitat studies.

Tagging and Tracking Studies

Satellite telemetry allows researchers to track sea turtles as they migrate between and within foraging and nesting areas. Tags are designed and attached in a manner that minimizes disturbance and/or harm to the turtle. The data help us understand migration patterns, identify feeding areas, and identify where turtles overlap with their primary threats (e.g., fisheries, vessel traffic).

Research to Reduce Bycatch in Fishing Gear

We observe fisheries to understand the level of sea turtle bycatch and the ways in which turtles interact with fishing gear. We work with partners and industry to develop modifications to fishing gear and/or fishing practices to reduce sea turtle bycatch while at the same time retaining a sustainable catch of targeted species. These efforts include the development of [turtle excluder devices \(TEDs\)](#) for use in trawl fisheries, use of circle hooks and certain bait types in longline fisheries, time and area closures/mesh size restrictions and low profile designs for gillnets, and modifications to pound net leaders.

[Learn more about our fishing gear research >](#)

Sea Turtle Genetics

NOAA Fisheries' National Sea Turtle Molecular Genetics Center serves as a worldwide central repository for sea turtle tissue and DNA samples and constitutes a major area of research supporting sea turtle conservation. For example, a turtle's genetic "fingerprint" can be used to

NOAA and Florida Fish and Wildlife Conservation Commission biologists release a loggerhead turtle with a satellite tag as part of a joint study on sea turtles in Florida Bay. Credit: Barbara Schroeder, NOAA

determine which nesting population it originated from.

[Learn more about our turtle genetics and isotope studies >](#)

Life History Studies

Life history studies include gathering information on such things as migration patterns, where turtles nest and forage, growth rates, age to maturity, and sex ratios. This information is important in understanding key biological parameters that influence population trends and inform the conservation status.

Documents

DOCUMENT

[Foreign Loggerhead Sea Turtle DPSs 5-Year Review](#)

A 5-year review is a periodic analysis of a species' status conducted to ensure that the listing...

International

DOCUMENT

Developing and Evaluating Methods to Determine Abundance and Trends of Northwest Atlantic Loggerhead Turtles

NOAA Technical Memorandum NMFS-OPR-67 October 2020

National

DOCUMENT

North Pacific Ocean Distinct Population Segment of Loggerhead Sea Turtle 5-Year Review

A 5-year review is a periodic analysis of a species' status conducted to ensure the accuracy of...

Pacific Islands, West Coast

DOCUMENT

Biological Opinion on the Federally Regulated Oil and Gas Program Activities in the Gulf of Mexico

Programmatic biological opinion on the Gulf of Mexico oil and Gas Program in federal waters...

Southeast, National

[More Documents >](#)

Data & Maps

DATA

Recovery Action Database

Tracks the implementation of recovery actions from Endangered Species Act (ESA) recovery plans.

National

MAP

Virginia Pound Net Regulated Area Map & GIS Data

New England/Mid-Atlantic

MAP

Summer Flounder Sea Turtle Protection Area Map & GIS Data

New England/Mid-Atlantic

MAP

Large Mesh Gillnet Restricted Area Map & GIS Data

New England/Mid-Atlantic

More Data and Maps >